WHAT IS CLAIMED IS:

1. A method of modifying a cornea of an eye, the cornea having an external surface, an internal portion and a main optical axis, the method comprising the steps of

aiming a first laser at the internal portion of the cornea, adjacent the external surface,

firing the first laser at the cornea, which separates the internal portion of the cornea forming a first internal surface and a second internal surface, the first internal surface facing in a posterior direction of the cornea and the second internal surface facing in an anterior direction of the cornea, the first and second internal surfaces forming an internal pocket therebetween,

forming an opening from the external surface of the cornea to the internal pocket, and

introducing ocular material through the opening and into the internal pocket of the cornea.

2. A method according to claim 1, and further comprising the step of

irradiating the ocular material so that a portion of the ocular material expands.

3. A method according to claim 1, and further comprising the step of

irradiating the ocular material so that a portion of the ocular material contracts.

4. A method according to claim 1, wherein

separating the internal portion of the cornea includes separating the internal portion of the cornea so that a portion of the first surface remains attached to the second surface by an area located at the main optical axis.

5. A method according to claim 4, and further including the steps of

aiming a second laser at the cornea, and

firing the second laser at the external surface of the cornea to ablate a portion of the external surface of the cornea.

6. A method according to claim 5, wherein

the steps of aiming and firing the second laser at the external surface of the cornea to ablate a portion of the external surface of the cornea include aiming and firing the second laser at the surface overlying the portion of the first internal surface that remains attached to the second internal surface by the area located at the main optical axis.

7. A method according to claim 1, wherein

the introducing step includes introducing the ocular material so that the ocular material at least partially encircles the main optical axis.

8. A method according to claim 1, wherein

the firing step includes firing the first laser at the cornea so that the internal pocket is substantially arcuate.

9. A method according to claim 1, wherein

the introducing ocular material step includes introducing a lens.

10. A method according to claim 9, wherein

the lens is substantially ring-shaped.

11. A method according to claim 1, wherein

the step of aiming the first laser at the internal portion of the cornea includes aiming the first laser between the external surface of the cornea and about one-third of the distance from the external surface of the cornea to an interior chamber of the eye.

12. A method according to claim 1, wherein

the steps of aiming and firing a first laser include aiming and firing an ultrashort pulse laser.

13. A method according to claim 12, wherein

the steps of aiming and firing a first laser include aiming and firing an ultra short pulse laser selected from a group consisting of a femtosecond laser, a picosecond laser and an attosecond laser.

14. A method according to claim 1, and further including the steps of

aiming a second laser at the cornea, and

firing the second laser at the external surface of the cornea to ablate a portion of the external surface of the cornea.

15. A method according to claim 14, wherein

the steps of aiming and firing a second laser at the external surface of the cornea include aiming and firing an excimer laser at the cornea.

16. A method according to claim 1, and further comprising the step of

placing a contact lens having a predetermined curvature on the external surface of the cornea to shape the ocular material.

17. A method according to claim 1, wherein

the step of introducing ocular material includes introducing a gel through the opening and into the internal pocket of the cornea.

18. A method according to claim 17, wherein

the step of introducing a gel through the opening includes introducing the gel through the opening using a needle.

19. A method according to claim 1, and further comprising the steps of

applying a chemical to the external surface of the cornea, and

passing the chemical from the external surface of the cornea to the internal pocket to polymerize the ocular material.

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20. A method of modifying a cornea of an eye having a main optical axis and an external surface, comprising the steps of

aiming an ultrashort pulse laser at the cornea,

firing the ultrashort pulse laser at the cornea, the laser separating the internal area of the cornea offset from the main optical axis into first and second substantially ring-shaped internal surfaces to form a corneal pocket, a portion of the first internal surface remaining attached to the second internal surface by an area located at the main optical axis, the first internal surface facing in a posterior direction of the cornea and the second internal surface facing in an anterior direction of the cornea,

forming an opening from the external surface of the cornea to the internal pocket, and

introducing an ocular material through the opening and into the internal pocket of the cornea, so that the ocular material at least partially encircles the portion of the first surface that remains attached to the second surface by the area located at the main optical axis,

aiming a second laser at the cornea, and

firing the second laser at an external surface of the cornea to ablate a portion of the external surface of the cornea.

21. A method according to claim 20, wherein

the step of aiming and firing an ultrashort pulse laser include aiming and firing an ultra short pulse laser selected from the group consisting of a femtosecond laser, a picosecond laser and an attosecond laser.

22. A method according to claim 20, wherein

the steps of aiming and firing a second laser at the surface of the cornea to ablate a portion of the surface of the cornea include aiming and firing the laser at the external surface overlying the portion of the cornea where the first internal surface remains attached to the second internal surface by the area located at the main optical axis.

23. A method according to claim 20, wherein

the steps of aiming and firing a second laser at the cornea include aiming and firing an excimer laser at the external surface of the cornea.

24. A system for corrective surgery of a cornea of an eye having a main optical axis, the combination comprising:

an ultrashort pulse laser adapted to separate an internal area of the cornea offset from the main optical axis into first and second internal surfaces to form a corneal pocket;

an ocular material adapted to be inserted in an opening into the corneal pocket and in-between the first and second internal surfaces of the corneal pocket; and

a second laser adapted to ablate a portion of a surface of the cornea after said ocular material is inserted in-between the first and second internal surfaces of the corneal flap.

25. A system according to claim 24, wherein

a portion of said first surface remains attached to said second surface by an area located at said main optical axis.

26. A system according to claim 25, wherein

said ocular material is a substantially ring-shaped ocular material and is adapted to be inserted so that said ocular material at least partially encircles said portion of said first surface that remains attached to said second surface by said area located at said main optical axis.

27. A system according to claim 26, wherein

said second laser is adapted to ablate a surface of the cornea at an area that overlies said portion of said first surface that remains attached to said second surface by the area located at said main optical axis.

28. A system according to claim 24, wherein

said ocular material includes at least a first material which, when exposed to a first energy, is adapted to increase a volume of at least a portion of the ocular material substantially without ablation, and a second material which, when exposed to a second energy, is adapted to decrease a volume of at least a portion of the ocular material substantially without ablation.

29. A system according to claim 24, wherein

said ultrashort pulse laser is a laser selected from the group consisting of a femtosecond laser, a picosecond laser and an attosecond laser.

30. A system according to claim 24, wherein

said second laser is an excimer laser.

31. A method of modifying a cornea having a main optical axis and an external surface, comprising the steps of

aiming and firing an ultrashort pulse laser at the cornea, which separates an internal area of the cornea adjacent the external surface into first and second internal surfaces to form an internal pocket, the first internal surface facing in a posterior direction of the cornea and the second internal surface facing in an anterior direction of the cornea,

forming an opening from the surface of cornea to the internal pocket,

introducing an ocular gel through the opening and into the internal pocket and in between the first and second internal surfaces of the internal pocket,

placing a contact lens having a predetermined curvature on the surface of the cornea to shape he ocular gel, and

irradiating the ocular gel so that the ocular gel solidifies.

32. A method according to claim 31, and further comprising

the step of aiming and firing a second laser at a surface of the cornea to ablate a portion of the surface of the cornea.

33. A method according to claim 32, wherein

the step of aiming and firing a second laser at the cornea include aiming and firing an excimer laser at the surface of the cornea.

34. A method according to claim 31, wherein

the step of aiming and firing an ultrashort pulse laser includes aiming and firing an ultrashort pulse laser selected from the group consisting of a femtosecond laser, a picosecond laser and an attosecond laser

35. A method according to claim 31, wherein

the step of irradiating the ocular material includes irradiating the ocular material so that the at least a portion of ocular material changes volume.